Cram, cram, cram,
The math. and the French, O student,
And spend the half of the time that remains
In resolves to be more prudent.

Plough, plough, plough,
The brainless and drones, O Prof.,
And give to the fusser and loafer
The just reward of his sloth.

Back, back, back,
Back to the woods and to pater,
To cram all we can, to plough thru the jam,
To hear and to feel results later.

—Shakspere.

Science Jottings

The office of president of the Massachusetts Institute of Technology, vacant since the resignation of Dr. Henry C. Pritchett, has been filled by the election of Richard C. MacLaurin, now head of the department of physics at Columbia University, New York. Dr. MacLaurin is a young man, only 38 years old, but has a high reputation as an instructor. He was born in Scotland, educated at Cambridge University, England. After graduating he spent some time in the United States and Canada. In 1898 he became professor in the University of New Zealand, and remained there until 1907, when he was called to Columbia. He is the author of a number of scientific papers.

It is probable that the four tunnels of the Pennsylvania Railroad Company between Manhattan and Long Island, N. Y., will adopt a track system consisting of treated red oak blocks set in concrete lining, on 20-inch centres. The blocks will be anchored to concrete by expansion bolts; and the 100-pound rails, 60 feet in length, will be laid on 7 x 12-inch plates, ⅝ inch in thickness. The plates will be fastened to the blocks by two lug screws and the rails will be held down by clips and screw spikes.

A combined carbon filament and mercury-vapor lamp is being introduced in Germany. The filament is enclosed in a U-shaped tube, in which is a drop of mercury. The air in the tube is exhausted, and in its place an inert gas is introduced, to permit the conduction of heat from the filament to the mercury. The U-shaped tube is enclosed in a bulb similar to the ordinary incandescent lamp bulb. When the current is turned on the carbon filament is immediately rendered incandescent, and the mercury gradually vaporizes, increasing the light intensity of the filament alone. A maximum tensity to more than double the value of intensity is obtained in about five minutes. The lamp consumes from 1.5 to 1.6 watts per candle-power, and its life is from 600 to 1,000 hours. The light it yields is perfectly white, containing none of the blue-green rays of the ordinary mercury-vapor lamp.

The United States Geological Survey is recommending the use of electric power in mines. The electric equipment, however, must be installed with great care, so as to guard against danger of fire or shock. The underground voltages should not exceed 650 for direct current, or 500 for alternating current, and lower voltages are preferable. Where a higher voltage is used, it should be transmitted by a completely insulated cable. No live wire should be permitted in any part of the mine in which gas is found to the amount of 2 per cent.